

LIX.—*Rhynchotal Notes*.—XXVIII. By W. L. DISTANT.Subfam. *CICADINÆ* (continued from p. 336).Division *CICADARIA* (*ante*, p. 323).

Since publishing my remarks on this division, a considerable quantity of fresh material has reached my hands, and to make the *Cicadaria* intelligible the generic analysis must be continued.

Stål (*Öfv. Vet.-Ak. Förh.* 1870, p. 714) proposed some subgenera, but on characters which, I venture to think, are insufficient and of a transient character. Thus his “nodo apicali scutelli,” which I take to be the cruciform elevation at the base of the mesonotum, is described as typical of *Chremistica* in being “transverso, convexo.” But this, though characteristic of the species he refers to, is not constant in the larger generic purview to which I am inclined, and the same remarks apply to the characters on which his subgenus *Diceroprocta* is founded. Had Stål subsequently revised the whole family with the skilled acumen displayed in his ‘Enumeratio Hemipterorum,’ there is a great probability that he would have shared these views.

Synopsis of Genera.

- I. Metasternum not or very slightly elevated, and not provided with a posterior process.
 - A. Length of head more than half the breadth of space between eyes; face usually very prominent.
 - a. Head including eyes considerably broader than base of mesonotum.
 - b. Lateral margins of pronotum with a distinct anterior lobe *Macrotristria.*
 - bb. Lateral margins of pronotum without an anterior lobe *Rhina.*
 - B. Length of head about half the breadth of space between eyes, or sometimes very slightly longer; head moderately truncate in front of eyes, face not prominent.
 - aa. Head, including eyes, about as wide, or very little wider than base of mesonotum.
 - c. Eyes more or less oblique and porrect, longer than broad *Cicada.*
 - cc. Eyes circular, as long as broad, moderately exerted upwardly *Antankaria.*
 - aaa. Head, including eyes, little more than two thirds the breadth of base of mesonotum .. *Cacama.*
 - C. Length of head not half the breadth of space between eyes.
 - aaaa. Head, including eyes, very much broader than base of mesonotum; space between eyes

almost equalling breadth at base of mesonotum; in front of eyes obliquely inclined, but not truncate. *Oria*.

- II. Metasternum elevated at middle and furnished with a posterior process directed backward *Cryptotynpana*.

RIHANA, gen. nov.

Cicada, subgen. *Chremistica*, Stål (part.), (Eiv. Vet.-Ak. Förh. 1870, p. 714, note.

Cicada, subgen. *Cicada*, Stål (part.), *loc. cit.*

Cicada, subgen. *Diceroprocta*, Stål (part.), *loc. cit.*

Head distinctly longer than half the breadth between eyes, and including eyes wider than base of mesonotum; face more or less prominent, its lateral margins in line with lateral margins of vertex; eyes oblique, longer than broad; pronotum a little narrowed behind eyes, about or almost as long as mesonotum in front of cruciform elevation; abdomen not, or scarcely, longer than length between apex of face and base of cruciform elevation; other characters generally as in *Cicada*.

Type, *R. ochracea*, Walk. (*Fidicina*).

This genus includes a number of Oriental and American species.

Rihana virgulata, sp. n.

Head black; a spot at apex of face, an irregularly shaped spot behind lateral margins of face, and a spot between ocelli and eyes, all of which are ochraceous; pronotum brownish ochraceous, anterior margin narrowly pale ochraceous, posterior and lateral margins greenish; a central discal fascia widened anteriorly and posteriorly, on each side of which is a short, discal, longitudinal line, and the incisures, black; mesonotum black, two linear, obconical, discal lines on anterior area, lateral margins, the cruciform elevation, and a round spot (containing a black centre) in front of each of its anterior angles ochraceous; abdomen piceous; face beneath with the transverse ridges obscure castaneous; sternum mostly ochraceous; opercula pale dull ochraceous, their inner areas black; tegmina and wings hyaline; tegmina with the costal membrane greenish ochraceous, the costal area fuscous, venation mostly fuscous, the basal and longitudinal veins to the apical areas somewhat broadly margined with fuscous; claval area to tegmina and abdominal area to wings pale brownish ochraceous.

Length of head more than half the breadth of space between eyes, its breadth including eyes broader than base of mesonotum; tympanal coverings about as long as broad; rostrum

reaching the posterior coxæ, its apex piceous ; opercula well separated at their inner angles, their inner and outer margins oblique, their posterior margin subtruncate and not quite reaching base of abdomen.

Long., excl. tegm., ♂ 16 mm. ; exp. tegm. 59 mm.

Hab. Mexico (Brit. Mus.).

This species is readily recognized by the marginal shadings to the apical areas of the tegmina &c.

Rihana Swalei, sp. n.

Head dark castaneous ; apical spot to face and a spot behind its lateral margins, lateral margins of vertex, and a spot between ocelli and eyes, all of them ochraceous ; pronotum castaneous, anterior margin (narrowly) and lateral and posterior margins ochraceous, a central discal fascia broadened anteriorly and posteriorly (containing a central ochraceous line), on each side of which is a short, discal, longitudinal line, and the incisures dark castaneous ; mesonotum pale castaneous, with two central obconical spots, on each side of which is a much longer sub-angulated spot, black, narrowly margined with pale ochraceous ; cruciform elevation and the tympanal coverings pale ochraceous ;



Rihana Swalei, Dist. ♂.

abdomen castaneous ; body beneath and legs pale ochraceous, a castaneous spot near intermediate and posterior coxæ ; face beneath pale castaneous, space between face and eyes black, containing a transverse ochraceous line ; tegmina and wings hyaline, both ochraceous at base ; tegmina with the costal membrane and about basal half of venation stramineous or pale greenish, costal area and remaining venation fuscous, transverse veins at bases of first to fifth and the seventh apical area and the lower longitudinal margin to seventh somewhat broadly infuscate ; apical area of basal cell fuscous.

Length of head more than half the breadth between eyes, and (including eyes) broader than base of mesonotum ; tym-

panal coverings about as long as broad; rostrum reaching the posterior coxæ, its apex piceous; opercula with their outer margins nearly straight, their posterior margins strongly oblique and rounded apically, reaching the third abdominal segment, their inner angles not meeting.

Long., excl. tegm., ♂ ♀ 19–20 mm.; exp. tegm. 61–69 mm.

Hab. — ? (Types, ♂ ♀, Brit. Mus.)

Two specimens, male and female, presented by Dr. Swale to the British Museum, but without locality, constitute the material on which this species is founded. The figure given will, however, prevent confusion. It probably belongs to Central America.

Genus *CICADA* (*ante*, p. 330).

Cicada, Linn. Syst. Nat. i. p. 704 (1766).

Cicada, subgen. *Chremistica*, Stål (part.), Öfv. Vet.-Ak. Förh. 1870, p. 714, note.

Cicada, subgen. *Cicada*, Stål (part.), *loc. cit.*

Cicada, subgen. *Diceroprocta*, Stål (part.), *loc. cit.*

Type, *C. plebeja*, Scop.

Cicada graminea, sp. n.

♀. Head and thorax above grassy green; pronotum inclining to ochraceous, probably through discoloration; head with the basal lateral areas of face, a transverse fascia between anterior margins of eyes, basal margin, and the area of the ocelli purplish brown; mesonotum with two central lines (united anteriorly and posteriorly) and the incisures purplish brown; mesonotum with two anterior, central, short, obconical spots, on each side of which is a much longer and more elongate spot, a central, discal, lanceolate spot, and a spot in front of each anterior angle of the cruciform elevation purplish brown, outwardly margined with greenish ochraceous; abdomen above somewhat thickly greyish tomentose; body beneath and legs more ochraceous than above, abdomen with some central discal transverse and some sublateral much smaller purplish-brown spots; tegmina and wings hyaline, the costal membrane and venation of basal area of tegmina greenish, remaining venation fuscous; venation of wings greenish.

Head truncate in front, its length half the breadth between eyes and (including eyes) as wide as base of mesonotum; anterior femora armed beneath with two strong spines; posterior tibiæ with three spines placed on each side on apical halves; rostrum not quite reaching posterior coxæ.

Long., excl. tegm., 26 mm.; exp. tegm. 85 mm.

Hab. Queensland (*F. P. Dodd*, Brit. Mus.).

ANTANKARIA, gen. nov.

Length of head about half the breadth between eyes and (including eyes) as wide as base of mesonotum; eyes circular, globular, moderately directed upward; pronotum a little narrowed behind eyes, about as long as mesonotum in front of the cruciform elevation; abdomen longer than space between apex of face and base of cruciform elevation; rostrum reaching posterior coxæ; anterior femora strongly toothed beneath; opercula in type not passing the base of metasternum; tegmina and wings talc-like.

Type, *A. madagascariensis*, Dist. (*Cicada*).

CACAMA, gen. nov.

Head (including eyes) little more than two thirds the breadth of base of mesonotum, anteriorly depressed, its length only a little more than half the breadth between eyes; pronotum considerably shorter than mesonotum, its lateral margins obliquely sinuate; mesonotum somewhat convexly gibbous; abdomen short, broad, convex above, its length equal to the space between apex of head and base of cruciform elevation, the lateral margins a little angulate at posterior segmental angles; tympana completely covered, lateral margins of the tympanal coverings subparallel to the abdominal margins; rostrum reaching or passing the posterior coxæ; metasternum very large; opercula about half the length of abdomen above, broad, their apical margins convexly rounded, their lateral margins almost straight; tegmina and wings (excepting base) hyaline, the first broad, their greatest width a little less than half their length, apical areas eight in number, the two lowermost small, subquadrangular.

Type, *C. maura*, Dist. (*Proarna*).

ORIA, gen. nov.

Head (including eyes) very much wider than base of mesonotum, its length not quite half the breadth between eyes, lateral margins almost obliquely straight, very slightly sinuate; pronotum shorter than mesonotum, its lateral margins moderately rounded, its posterior margin waved or broadly sinuate; abdomen narrowed posteriorly in both sexes; the tympana covered, tympanal coverings in male about as long as broad; rostrum extending about halfway between the intermediate and posterior coxæ and terminating in the grooved anterior area of the metasternal process; opercula

small, scarcely extending beyond the basal segment of the abdomen; tegmina and wings hyaline, a little opaque at base.

Type, *O. boliviana*, Dist. (*Cicada*).

Cryptotympana varicolor, sp. n.

♀. Body brownish ochraceous; pronotum with two inwardly curved obconical black spots and two more obsolete black oblique spots on each lateral area between the incisures, but not extending to the posterior margin; mesonotum with a large pale greenish discal spot, its base truncate and resting on the cruciform elevation, anteriorly divided into three angular prolongations which about reach the anterior margin; lateral areas of the sternum somewhat pale greenish. Tegmina and wings hyaline, bases of both brownish ochraceous; the tegmina with the costal membrane and area, the basal cell, the greater part of the venation, and the margins of the transverse veins at bases of second and third apical areas brownish ochraceous.

Length of head about half the width between eyes, and including eyes considerably broader than base of mesonotum; rostrum passing the intermediate coxæ; body beneath finely pilose; anterior femora armed with two long spines beneath.

Long., excl. tegm., ♀ 31 mm.; exp. tegm. 102 mm.

Hab. Sumbawa Island (Paris Mus.).

LX.—*British Isopoda of the Families Ægidæ, Cirolanidæ, Idoteidæ, and Arcturidæ.* By Canon A. M. NORMAN, M.A., D.C.L., LL.D., F.R.S., &c.

[Plates XII. & XIII.]

THE purpose of this paper is to bring up our knowledge of the Crustacea of the above-named families to the present time. Most of the additions to our fauna are here first made known. In Bate and Westwood's 'Sessile-eyed Crustacea' the numbers of species described were:—*Ægidæ* 5, *Cirolanidæ* 4, *Idoteidæ* 7, *Arcturidæ* 3 (of these, *Arcturus gracilis* was the male of *A. longicornis*). The following notes record—*Ægidæ* 10 (one of these, *Æ. rosacea*, a doubtful British species), *Cirolanidæ* 9, *Idoteidæ* 11, *Arcturidæ* 6.

Besides the British Isopods there have been added such species as have been taken by dredging-expeditions of the